National Transportation Safety Board NTSB ID: ANC98LA018 Aircraft Registration Number: N9316F FACTUAL REPORT Occurrence Date: 01/30/1998 Most Critical Injury: Minor AVIATION Occurrence Type: Accident Investigated By: NTSB Location/Time Nearest City/Place State Zip Code Local Time Time Zone 1700 PORT HEIDEN 99549 AST ΑK Distance From Landing Facility: 1 Direction From Airport: 220 Airport Proximity: Off Airport/Airstrip Aircraft Information Summary Aircraft Manufacturer Model/Series Type of Aircraft Cessna 208A Airplane

Sightseeing Flight: No

Narrative

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

On January 30, 1998, at 1700 Alaska standard time, a Cessna 208A airplane, N9316F, was destroyed when it impacted frozen tundra, about one mile southwest of the Port Heiden Airport, Port Heiden, Alaska. The airline transport pilot received minor injuries. The airplane was operated by Peninsula Airways, Inc., of Anchorage, Alaska. The flight departed at 1700, and was conducted under 14 CFR Part 135 as a nonscheduled cargo flight from Port Heiden southbound to Chignik, Alaska.

Air Medical Transport Flight: No

During a telephone interview with the NTSB investigator-in-charge (IIC) at 1700 on February 3, 1998, the pilot reported departing in visual meteorological conditions of three to four miles visibility with high ceilings. He stated the airplane encountered freezing rain about five miles south of the airport while in cruise at 1,200 feet msl, and rapidly accumulated ice on the airframe, wings, and windshield. The pilot said he initially changed altitude in an attempt to exit the icing conditions. Ice accumulation continued, so he elected to return to Port Heiden. While maneuvering to land at the airport, the airplane was unable to maintain altitude while at full engine power. The pilot related that any angle of bank resulted in the onset of prestall buffet. He stated that he decided to land on a frozen lake south of the airport. He said that the airplane did not reach the lake, "mushed into the ground," and that when he attempted to flare to land, the left wing stalled.

He said the airplane was not equipped with deice boots, nor propeller anti-ice. It was equipped with an electrically heated windshield, which the pilot indicated was melting ice into slush. The pilot noted that he was unable to see through the windshield. Postaccident testing of the electric windshield heat revealed no discrepancies.

Photographs taken immediately after the accident, and postaccident inspection by two FAA inspectors on February 4, 1998, revealed a 1/2 inch layer of clear ice covering all the upper and lower airfoil surfaces of the airplane, from leading edges to between 1/3 and 1/2 of the chords. All antennas were coated with approximately 1/2 inch of clear ice.

No terminal weather forecast is available for Port Heiden. The Area Forecast valid for the time of the accident did not include freezing precipitation.

Weather observations for Port Heiden are obtained from a part-time certified weather observer under contract to the National Weather Service (NWS). This individual has calibrated observation instruments which are contractually required to be located at the airport. After recording the weather, the observer sends the information via modem to the NWS. This weather is then available to anyone with access to NWS data, normally within five minutes of the observation.

The 1553 NWS data base observation indicates light snow. Light snow is not entered on the observer's "Surface Weather Observations (Metar/Speci)" form at 1545.

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Narrative (Continued)

The weather observation for Port Heiden, entered into the NWS data base at 1653 was: visibility of one mile in -SN (light snow), vertical visibility of 100 feet, temperature minus 7 degrees C. The observation entered on the observer's "Surface Weather Observations (Metar/Speci)" form at 1645, submitted to the NWS, indicated -SNFZDL (light snow and freezing drizzle), and a vertical visibility of 200 feet.

The observer's "Surface Weather Observations (Metar/Speci)" form contains an entry for a SPECI (special observation) at 1705 of one mile visibility, light snow and freezing drizzle, and a vertical visibility of 100 feet. No special observation is in the NWS data base. The next recorded observation is at 1945.

The pilot stated the departure weather was high ceilings, three miles visibility, and light precipitation. The station manager who helped load the airplane, stated the weather at the time of departure (1650) was 600 to 700 feet overcast, 3 to 4 miles visibility, and light precipitation. Both of these individuals said they observed the weather observer depart the airport about 1630. The station manager told two FAA inspectors that the weather observer did not return to the airport until about 1715.

The observer told these FAA inspectors that he took weather observations from his home, about five miles south of the airport, and that he had the equipment there to do so. A review of the NWS contract for this station indicated the required calibrated equipment is located at the observer's office at the airport.

Interviews with NWS managers revealed that weather observations are not valid if not taken from the specified geographic location.

On the date of the accident, the 37th edition of the Kodiak VFR sectional chart, valid until February 28, 1998, depicted an automated weather observation station (AWOS-3) to be available at Port Heiden on frequency 124.4 Mhz. Interviews between the NTSB investigator and both NWS managers and company pilots revealed that this station was not commissioned. Weather information was not available on this frequency, nor had it ever been. The 38th edition of this chart did not depict this AWOS-3 station.

14 CFR 135.213 states in part, "(a) Whenever a person operating an aircraft under this part is required to use a weather report..., that person shall use that of the U.S. National Weather Service, or a source approved by the National Weather Service.... However... the pilot in command may, if such a report is unavailable, use ... that pilot's own observations...."

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FACIDAL REFOR	Occui	TICHOC Date	. 01/30/1990										
AVIATION	Occui	rrence Type	e: Accident										
Landing Facility/Approach Info	ormation												
Airport Name	Airport ID:	Airport Eleva	tion	Runway Used R		Runwa	ay Lengt	th	Runw	ay Width			
PORT HEIDEN	PTH	86 Ft	. MSL	0									
Runway Surface Type:													
Runway Surface Condition:													
Type Instrument Approach: NONE													
VFR Approach/Landing: Forced La	ınding; Traffic Pa	ittern											
Aircraft Information													
Aircraft Manufacturer Cessna							Model/Series S 208A						
Cessna 208A 208-00011 Airworthiness Certificate(s): Normal													
Landing Gear Type: Tricycle													
Homebuilt Aircraft? No	Aircraft? No Number of Seats: 2					Certified Max Gross Wt.				er of Engines: 1			
= 11				Engine Manufacturer: P&W				Model/Series: PT-6A			Rated Power: 500 HP		
- Aircraft Inspection Information													
Type of Last Inspection			Date of La	Date of Last Inspection Time Si			ince Last Inspection			Airfram	Airframe Total Time		
Continuous Airworthiness			01/22/19	01/22/1998				29 Hours				13478 Hours	
- Emergency Locator Transmitter (E	LT) Information												
ELT Installed? Yes		ELT Aided in Locating Accident Site?											
Owner/Operator Information													
Registered Aircraft Owner	Street Address 6100 BOEING AVE												
PENINSULA AIRWAYS, INC.	City							State		Zip Code			
	Street	ANCHORAGE Street Address								99502			
Operator of Aircraft	Same as Reg'd Aircraft Owner												
Same as Reg'd Aircraft Owner	City						State	e	Zip Code				
Operator Does Business As: PENA			Op	perator Design	nator Co	de: PN	ISA						
- Type of U.S. Certificate(s) Held:													
Air Carrier Operating Certificate(s):	Commuter Air Ca	arrier; C	On-deman	d Air Taxi									
Operating Certificate:				Operator (Certifica	ate:							
Regulation Flight Conducted Under:	Part 135: Air Ta	xi & Co	ommuter										
Type of Flight Operation Conducted:	Unknown												
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Occurrence Type: Accident													
First Pilot Information													
Name		City			State	Da	ite of Birth	Age					
On File		On File			On F	ile 📗	n File	47					
OIIT IIE						""	1 47						
Sex: M	Seat Occupied:	Pilot		Ce	ertificate	Number	: On File						
Certificate(s): Airline Transport; Commercial													
Airplane Rating(s): Multi-engine Land; Multi-engine Sea; Single-engine Land													
Rotorcraft/Glider/LTA: None													
Instrument Rating(s): Airplane													
Instructor Rating(s): None													
Type Rating	g/Endorsement fo		Current Biennial Flight Review?										
Medical Ce	rt.: Class 1	ivers/lim.	S/lim. Date of Last Medical Exam: 09/05/1997										
<u>'</u>													
- Flight Tim			This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Night	Actual	Instrument Simulated	Ro	otorcraft	Glider	Lighter Than Air	
Total Time	etal Time		4500	11500	3500	150	00 1	500 1	00				
Pilot In Con	nmand(PIC)	14800	4450	11400	3400	14	50 1	500 1	00				
Instructor													
Last 90 Day	ys	226	118	185	41		18						
Last 30 Day	ys	75	39	64	11		6						
Last 24 Hou	urs	4	4	4									
Seatbelt Us	sed? Yes	Shou	ılder Harness	Used? Yes	То	Toxicology Performed? No Second Pilot? No							
Flight Pla	n/Itinerary												
Type of Flig	ght Plan Filed: Co	ompany VFI	R										
Departure F	Point					St	tate	Airport Identif	er	Departur	re Time	Time Zone	
PORT HE	IDEN					AI	κ	PTH		1650		AST	
Destination	1	Si	tate	Airport Identif	ier								
CHIGNIK			AK AJC										
Type of Clearance: None													
Type of Airs	space: Class	G											
Weather	Information												
Source of I	-	any; Nationa	al Weather	Service									
Method of	Briefing:												
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AYJATION				Occurrence Type: Accident									
Weather Information													
WOF ID	Observation Time	Time Zone	wo	F Elevat	ion	WOF D	WOF Distance From Accident Si				Direction From Accident Site		
	0000			0 Ft	. MSL				0 NM		0 Deg. Mag.		
Sky/Lowes	st Cloud Condition: Unk					0 Ft. AGL			Condition of Light: Day				
Lowest Ce		1500 Ft.	AGL	Visib	sibility: 3		SM	Alti	meter:	"Hg			
Temperatu		°C Wind Direction: 260					Density Altitude: Ft.						
Wind Spee	ed: 6		Weather Condtions at Accident					nt Site: Visual Conditions					
Visibility (F	RVR): 0 Ft	. Visibilit	y (RVV)	0 SM Intensity of Precipitation: Heavy									
Restrictions to Visibility:													
Type of Precipitation: Freezing Rain													
Type of Fredipitation. Thousing Italin													
Accident Information													
Aircraft Da	Ai	Aircraft Fire:					Aircraft Exp	olosio	n				
Classificati	on:												
- Injury Summary Matrix Fatal Seri			Serious	Mino	or	None	TOTAL						
First Pi	ilot				1			1					
Second	d Pilot												
Studen	t Pilot												
Flight I	nstructor												
Check	Pilot												
Flight E	Engineer												
Cabin A	Attendants												
Other C	Crew												
Passer	ngers												
- TOTAL A	ABOARD -				1			1					
Other 0	Ground	0		0	0			0					
- GRANE	O TOTAL -	0		0	1			1					
				•	•		•						

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Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

MATTHEW L. THOMAS

Additional Persons Participating in This Accident/Incident Investigation:

ALICE L GOMMOLL FAA FSDO; 4510 W. INTL AIRPORT ANCHORAGE, AK 99502

FRANK L MCGARR FAA FSDO; 4510 W. INTL AIRPORT ANCHORAGE, AK 99502

TERRY A BATEMAN FAA FSDO; 4510 W. INTL AIRPORT ANCHORAGE, AK 99502